INSTRUCTIONS FOR USING THE
SUN SCOPE PATTERN PICK-UP #1747-102
TO TEST THE DELCO REMY HIGH ENERGY IGNITION SYSTEM

The Sun H.E.I. PATTERN PICK-UP #1747-102 is designed to be used only with Sun Scope testers equipped with a clamp-on type secondary pattern pick-up, Part #1747-101.

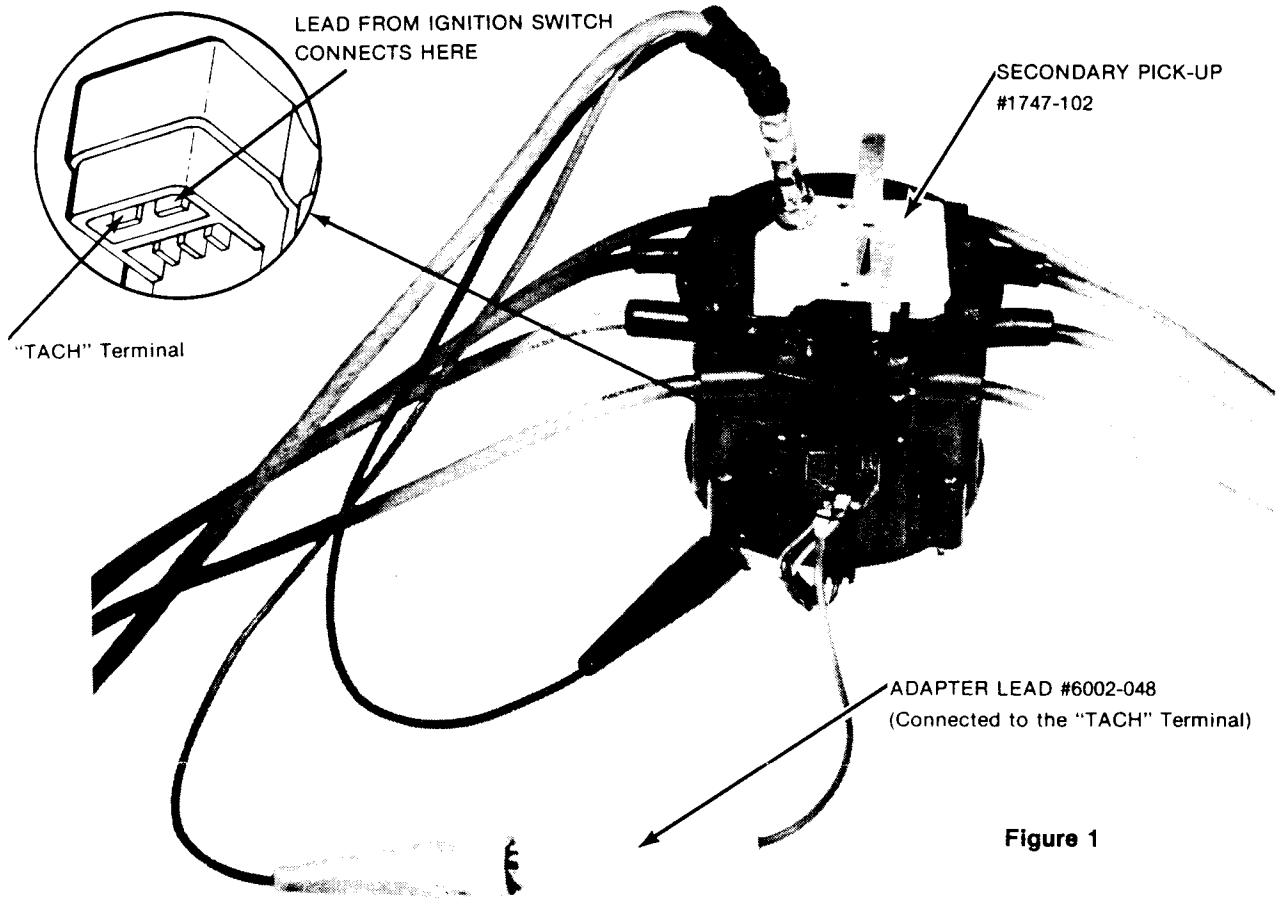


**Figure 1**

## H.E.I. DESCRIPTION

The H.E.I. System is a complete single-unit ignition assembly less the spark plugs. It combines the distributor, rotor, cap, secondary wiring harness, ignition coil and the electronic module into a one-unit assembly.

The distributor cap provides a mounting recess for the ignition coil and includes a separate insulated coil cover.

## INSTALLATION OF H.E.I. PICK-UP ON TESTER

Remove the CHROME CLAMP-ON PICK-UP (#1747-101) from the Secondary Pick-Up lead. Replace it with the molded, non-metalic Pick-Up assembly, Sun Part #1747-102.

Test Connections to the Engine:

1. Clamp the TRIGGER PICK-UP around the number one spark plug wire near the distributor cap.
2. Snap the MOLDED PICK-UP assembly into place on top of the coil cover and secure it with the spring clips as shown in Figure 1.
3. With the aid of Sun ADAPTER LEAD #6002-048, connect the Red lead of the pattern pick-up to the system's "Tach" terminal.
4. Connect the Black lead of the pick-up to any convenient vehicle ground.
5. Depress the Cylinder Balance CANCEL button.

## CYLINDER POWER BALANCE TESTING

Cylinder Power balance tests can be performed with the latest production Sun testers, using the testers' cylinder power balance push buttons.

On older testers that have not been modified, do not use the cylinder power balance push buttons. Contact your local Sun representative or branch office for complete information regarding modifications available.

## TEST PROCEDURE

The scope can now be used in the normal manner for all ignition tests. However, the following precautions should be observed:

1. The tachometer terminal of the distributor must never be connected to the ground, as damage to the electronic circuitry of the system can result.

2. Secondary available voltage and insulation tests can be made by removing one spark plug wire at a time with the engine running. Be sure to use insulated pliers and twist the spark plug boot slowly from side to side to release it before pulling the wire away from the plug.

   Do not remove more than one wire at a time.

## COMPRESSION TESTS

Before performing compression tests on an engine equipped with an H.E.I. system it is required that the lead from the ignition switch be disconnected from the terminal block on the distributor cap to render the system inoperative. Do not permit the ignition switch lead to contact ground while it is disconnected from the ignition system. Compression tests can be performed in the usual manner if the above precautions are observed.